

# Week 3 Full Length Practice Exam

## Attempt History

	Attempt	Time	Score
LATEST	<a href="#">Attempt 1</a>	180 minutes	150 out of 150

Score for this quiz: **150** out of 150

Submitted Jan 26 at 2:45pm

This attempt took 180 minutes.

### Question 1

1 / 1 pts

An older adult with diabetes mellitus presents with leg cramps. She states that the cramps are worst when walking to the supermarket. If she stops to rest, the pain subsides. The nurse practitioner knows that this patient needs a workup for:

Popliteal aneurism

[Intermittent claudication](#)

Deep vein thrombosis

Benign nocturnal leg

cramps

### Question 2

1 / 1 pts

Your patient presents with bradycardia, severe nausea, and substernal pain. STEMI was identified on the EKG. Which region of the heart is most likely involved?

[Inferior Wall](#)

The inferior wall, fed by the right coronary artery is commonly associated with these symptoms. Remember right equals rate as it is the blood supply for the SA and AV nodes in most patients. Dyspepsia is common in RCA territory injury due to vagal stimulation not typical of other areas.

### Question 3

1 / 1 pts

Recommendation for lipid check in adolescent with type 1 DM?

1 year

Remember than with pediatric patients with diabetes, the easiest way to remember the evaluation schedule is to perform lipid checks is with annual physicals.

### Question 4

1 / 1 pts

An 80-year-old man with a history of atrial fibrillation presents with sudden-onset unilateral leg pain and pallor. What is the most likely diagnosis?

Deep vein thrombosis

Acute arterial occlusion

Cellulitis

Peripheral artery disease

### Question 5

1 / 1 pts

An adult patient recently placed on angiotensin-converting enzyme (ACE) inhibitor for hypertension returns with a report of a dry, persistent cough. On examination, no indication of a respiratory problem is noted. Which of the following is the most appropriate intervention?

Switch to an angiotensin II receptor blocker

Obtain a chest X-ray with posterior-anterior and lateral views

Continue the ACE inhibitor and prescribe a mild antitussive

Continue the current treatment regimen

## Question 6

1 / 1 pts

A 65 year old alcoholic patient presents with a new onset of persistent palpitations and anxiety for the past 3 days. Your monitor is applied and an irregularly irregular rhythm is noted. Which of the following evaluations should be performed first in your treatment?

Ordering a BNP and Vitamin D level

Prescribing amiodarone 150mg IV bolus

Ordering a transthoracic echocardiogram

After 48-72 hrs of atrial fibrillation, the presence of thrombus must be excluded before any rhythm-modifying intervention. Transthoracic echo is the gold standard for a quick look for any clot burden, most likely found in the left atrial appendage. Amiodarone is likely to convert the patient to a sinus rhythm and needs to be done only after determining no evidence of thrombus is present. BNP and vitamin D are inconsequential in the treatment of A-fib (TSH, serum K, and magnesium would be valuable). Bilateral radial pulse checks are not assessed for a-fib, but rather for patients with concern for aortic dissection and/or vascular blockage (subclavian stenosis, thoracic outlet syndrome, etc)

Palpating pulses bilaterally to identify unilateral pulse deficit

## Question 7

1 / 1 pts

A 70-year-old man with a history of atrial fibrillation presents with sudden-onset left-sided weakness and slurred speech. What is the most likely diagnosis?

Seizure

Transient ischemic attack (TIA)

Myocardial infarction (MI)

## Stroke

The patient with a history of atrial fibrillation for over 48 hours without anticoagulation is at risk of an embolic stroke, secondary to mobilization of a thrombus (90% of which occur in the left atrial appendage). A patient exhibiting signs of a stroke such as unilateral weakness and slurred speech, in addition to being evaluated for stroke with cranial imaging to rule out a hemorrhagic etiology, should also be evaluated for a cardiac etiology as noted above with an echocardiogram.

### Question 8

1 / 1 pts

What is the key long-term benefit of using carvedilol for patients with coronary artery disease and heart failure with reduced ejection fraction (HFrEF)?

Reduction in cardiac output

Increase in libido

Baseline reduction of blood pressure

### Potential increase in ejection fraction

EF increase is a key reason for using carvedilol over metoprolol for patients with low EF states. Libido unfortunately can be negatively impacted by any beta blocker. Cardiac output should only improve with long term use, not decrease, and beta blockers may reduce blood pressure slightly, but that is not their key long-term benefit. In fact, they are not even considered for routine anti-hypertensive management per JNC-8 guidelines.

### Question 9

1 / 1 pts

A grade III/VI, low-pitched, diastolic, rumbling murmur heard at the apex, and best heard in the left lateral decubitus position, is most indicative of which of the following types of valve problem?

Aortic stenosis

**Correct Answer**

Mitral stenosis

Aortic regurgitation

Mitral regurgitation

### Question 10

1 / 1 pts

What is the chamber which directly pumps blood into the ascending aorta?

Right Atrium

Left Atrium

Right Ventricle

Left Ventricle

In the pathway of cardiac blood flow, the aorta is directly after the left ventricular outflow tract.

### Question 11

1 / 1 pts

An adult female presents with a chief complaint of fatigue and weight gain. She states that she doesn't feel like herself. A diagnosis of hypothyroidism is suspected. Which of the following physical findings would support this diagnosis?

Palpitation, bradycardia, and constipation

Tachycardia, exophthalmos, brittle hair

Dry skin, bradycardia, and hypoactive deep tendon reflexes

Diarrhea, tachycardia, and hypoactive deep tendon reflexes

Dry skin, bradycardia, and hypoactive deep tendon reflexes are all fairly classic signs of hypothyroidism. To further substantiate these concerns, the patient should have their TSH and T3 and Free T4 checked, and it is likely their TSH would be elevated, T3/T4 low.

## Question 12

1 / 1 pts

A 39-year-old male with type 1 DM is seen in the urgent care after a recent hospitalization for DKA. Treated with IV fluids, IV insulin, and potassium correction, His BS decreases to 120 mg/dL and is transitioned from IV insulin to Sub Q. After 6 hours he begins vomiting and ABG is done: pH 7.19, CO<sub>2</sub> 13, K<sup>+</sup> 5.5, glucose 180. Which of the following is the most likely reason for persistent acidosis?

Premature discontinuation of insulin drip

Failure to give bicarbonate

Lack of absorption of Sub Q insulin

Failure to correct hyperkalemia

Glucose is only one of the parameters that needs to be followed in DKA. It takes longer for ketones to clear than glucose to normalize. Insulin drip should be continued until ketonemia has resolved and the anion gap has closed. If IV insulin is discontinued prematurely the patient may have rebound acidosis. Bicarbonate replacement has been controversial in DKA.

### Question 13

1 / 1 pts

Classic findings in a patient with a pheochromocytoma include which of the following?

Depression

Postural hypotension

Paroxysmal symptoms

Generalized anxiety

Patient symptoms will be paroxysmal rather than constant due to the intermittent secretion/surge of catecholamines

### Question 14

1 / 1 pts

Pheochromocytoma is best diagnosed by which of the following tests:

Plasma metanephrines with blood pressure values

24-hour urine for catecholamines/metanephrines and plasma metanephrines

Blood pressure values and adrenal CT/MRI

Adrenal CT/MRI

Pheochromocytoma is catecholamine producing tumor. Must have diagnostics that reveal increased levels of catecholamines. A negative test virtually excludes pheochromocytoma.

### Question 15

1 / 1 pts

A 48-year-old female presents with a history of hypothyroidism controlled with levothyroxine (Synthroid). She reports that she has been taking excessive amounts of the drug over the past year, to control her weight. This behavior can cause or aggravate which of the following conditions?

Bradycardia

Thyroid malignancy

Osteoporosis

Migraine headaches

Overuse of levothyroxine is not associated with thyroid malignancy or migraine headaches, it is more likely to cause tachycardia rather than bradycardia. Osteoporosis is associated with overuse of levothyroxine.

### Question 16

1 / 1 pts

An adult patient diagnosed with type 2 diabetes mellitus presents for a recheck. The patient follows a carbohydrate counting diet and walks 30 minutes 5 times weekly. Current fasting blood glucose = 116 mg/dL [normal = less than 99 mg/dL] and A1c = 6.3% [normal = less than 7.0%]. In accordance with the American Diabetes Association, the nurse practitioner would recommend that the next follow-up appointment be scheduled for:

9 months.

2 months.

1 year.

6 months.

Based off of the ADA recommendation, this patient should be evaluated in six months. They are actually showing good control and excellent compliance with diet and exercise management strategies. If there compliance was worse or they were not controlled with their A1c, this would likely be a three month follow up.

### Question 17

1 / 1 pts

Patients on levothyroxine should be monitored for signs of:

Angina pectoris and dysrhythmias

Memory deficits and hyperreflexia

Ankle edema and discomfort

Increased nausea and constipation

The risk of any supplementation is OVER-supplementation and of the potential options, angina pectoris and dysrhythmias are clinical symptoms associated with hyperthyroidism, or in this case over-treated hypothyroidism causing extrinsic hyperthyroid symptoms.

### Question 18

1 / 1 pts

Which of the following is at highest risk for type II diabetes?

An adult woman with a BMI of 34 who just delivered a baby weighing 10 lbs

A 63-year-old Hispanic male with a BMI of 23 who works as a carpenter

A 51-year-old black female with a BMI of 22 who walks daily at least 30 minutes

A 77-year-old Caucasian male with a BMI of 27 who is sedentary

Of these options, an adult woman with a BMI of 34 who just delivered a baby weighing 10 lbs is the most likely due to their increased BMI and the large size of the baby. Giving birth to a large baby, also known as a large-for-gestational-age (LGA) baby, can increase the risk of developing type 2 diabetes later in life. Women who give birth to a LGA baby are 10% more likely to develop DMII 10-14 years after pregnancy compared to women who give birth to babies of average gestational age (AGA). This increased risk is even after adjusting for other risk factors, such as age, obesity, high blood pressure, and family history of diabetes.

### Question 19

1 / 1 pts

A patient presents for recheck of their thyroid-stimulating hormone (TSH). The patient was started on levothyroxine (Synthroid) 50 mcg 8 weeks ago. Today the TSH is 10.5  $\mu\text{U}/\text{mL}$  [normal = 0.4-2.5  $\mu\text{U}/\text{mL}$ ]. Based on this lab work, which is the most appropriate action?

Decrease levothyroxine (Synthroid) to 25 mcg daily.

#### Correct Answer

Increase levothyroxine (Synthroid) to 75 mcg daily.

Change to Armour Thyroid 50 mcg daily.

Keep levothyroxine (Synthroid) at 50 mcg daily.

The patient has been initiated on a reasonable starting dose with levothyroxine and given the appropriate 6 to 8 week timeline to evaluate for response. As the patient has not yet seen a decrease in their TSH down to a normal range, it would be suggestive that they are not yet at an appropriate dose of levothyroxine, and this would need to be increased. To further evaluate this, T3 and three T4 should be evaluated and would more accurately quantify their response.

## Question 20

1 / 1 pts

A patient has a 3 cm pituitary mass noted on CT. What is your next step in evaluating the patient?

[Screen for hormone deficiencies](#)

Repeat MRI in 3 months

Start Cabergoline

Refer to surgery

Initial work up includes hormone testing. Cabergoline is the treatment for prolactinoma. Surgery consult is indicated when there are VF deficits and/or abutment/compression on optic nerves or chiasm or if adenoma is hyperfunctioning. Adenomas >1 cm with no VF deficit or abutment/compression of optic nerves or chiasm require a follow up MRI at 6 months.

## Question 21

1 / 1 pts

An elderly patient diagnosed with end-stage lung cancer has been refusing meals, opting instead for ice cream only. The family is concerned about the patient not getting enough nutrition. The NP:

prescribe methylphenidate for appetite stimulation

explains loss of appetite is common at the end of life

screens the patient for depression

order a U/A and CBC

Death is an uncomfortable topic, and must be handled tactfully. Factual re-orientation to the terminal state of a patient's condition may be appropriate when unrealistic expectations for their longevity have been voiced. The reasonable choice in this case is to describe the normalcy of what the patient is experiencing with their loss of appetite and their terminal state. Testing the patient for depression has really no clinical bearing on this particular time nor does prescribing methylphenidate. Ordering a UA and CBC would suggest a concern of a urinary tract infection, and that is not a likely scenario to describe the patient's existing condition. Support the patient as his advocate by helping the man enjoy the ice cream he requested.

## Question 22

1 / 1 pts

A 92-year-old presents with a decline in personal care and increasing forgetfulness. They had a CVA a three years ago with mild cognitive changes then which has slowly progressed. The more likely diagnosis in this case is?

Alzheimer's dementia

Lewy-body dementia

Progressive vascular dementia

Mini-strokes

## Question 23

1 / 1 pts

A frail elderly patient presents with constipation. Which of the following normal physiologic changes seen with aging is the most likely cause?

Increased absorption of calcium

Decreased pancreatic secretions

Increased bile secretion

Decreased bowel muscle tone

The frail, elderly patient will typically have their GI track decrease bile secretion and decrease absorption of calcium. A decrease in pancreas secretions is not related to presence of constipation, however, decreased bowel muscle tone certainly does reduce the GI motility and increase the transit time, thereby increasing the drying of stool in the large intestine which leads to constipation

## Question 24

1 / 1 pts

The management of COPD in the elderly is best guided by:

arterial blood gases.

radiologic imaging.

symptomatology.

spirometry.

Symptomatology is what guides COPD management since the severity and frequency of symptoms will warrant changes and additions to medications as exacerbations present.

Although very useful tool for chronic management and baseline status, spirometry does not typically dictate therapy, rather diagnose the disease state itself. Our blood gases may be used for clinically correlate severity during an exacerbation, and radiologic imaging may showcase severity of stable chronic finding such as somatic, lung tissue or bullae.

## Question 25

1 / 1 pts

Which is best performed to assess the risk for fall in an 88-year old

adult? Clock-drawing test

[Get up and go test](#)

Global screening assessment

PHQ-2 questionnaire

This question is asking you if you understand the different screening to available for Mobility and fall risk. The global screening assessment, PHQ-2 questionnaire, and clock drawing test have no clinical significance to mobility. The "get up and go" test is the only option that is a mobility test of these four.

## Question 26

1 / 1 pts

The most specific indicator of the presence of ascites is:

A positive Murphy test

A prominent fluid wave

A liver scratch test

Costovertebral angle tenderness

During assessment for ascites, a fluid wave test should produce a prominent fluid wave if the patient is experiencing ascites.

### Question 27

1 / 1 pts

An adult female with rheumatoid arthritis presents to the office for a follow up. She is currently taking methotrexate and over the counter Ibuprofen. Today she complains of severe stomach pain and intense abdominal cramping. After the nurse practitioner makes appropriate adjustments to the patient's medication regimen, the patient still complains of abdominal discomfort and reports dark stools. The practitioner suspects:

NSAID-induced hepatitis

Ulcerative colitis

Diverticulitis

Gastric ulceration

The overuse of NSAIDs such as ibuprofen (Advil) have caused the prostaglandin inhibition-related thinning of the mucosal lining of the stomach, thereby predisposing the patient to gastric ulceration and GI bleeding.

### Question 28

1 / 1 pts

Which of the following gastrointestinal changes is associated with normal aging?

Decreased production of gastric acid

Increased salivation

Decreased incidence of gallstones

Increased esophageal emptying

Normal GI changes with aging include decreased production of gastric acid, increase incidence of gallstone, decreased salivation, and decrease esophageal emptying.

### Question 29

1 / 1 pts

Where can Crohn's disease be located within the GI tract and how does it present (continuous or patchy)?

In the colon only and patchy

Patchy inflammation throughout the small bowel and colon

In the esophagus and stomach only

In the colon continuous throughout

Crohn's disease unlike UC is a patchy inflammation that can be found throughout the small bowel and colon.

### Question 30

1 / 1 pts

A 43-year-old male with past medical history significant for GERD, smoking, and obesity presents to your clinic for worsening GERD symptoms, he has been taking protonix

40mg daily with no improvement. What imaging/diagnostic would be warranted for this patient.

MRI

EGD

Barium x-ray

ERCP

Due to this patient's underlying history of GERD, and risk factors of obesity and smoking he should be screened for Barrett's esophagus. This would be done by performing an EGD

### Question 31

1 / 1 pts

The most common side effect of the oral ribavirin used in the treatment of hepatitis C is:

hypothyroidism.

**Correct Answer**

depression.

hemolytic anemia.

weight gain.

It is important to note that ribavirin will not treat hepatitis C unless it is taken with another medication called pegylated-interferon  $\alpha$  (PEG-IFN $\alpha$ ). This therapy is not considered evidence based anymore due to better options now available and the

considerable side effect profile of ribavirin which includes depression as it's most significant side effect affecting 30-40% of those taking it.

### Question 32

1 / 1 pts

Adult patient with left lower quadrant abdominal pain dx with diverticulitis. No allergies. Following is tx of choice:

Prednisone

Keflex

Bactrim

Medrol

Medrol and Prednisone are options that might be considered for management of inflammatory bowel disease such as Crohn's or ulcerative colitis, but for diverticulitis, a medication that has broad coverage including gram negative coverage, should be considered. Sulfamethoxazole/Trimethoprim (Bactrim) is the most appropriate choice for this patient.

### Question 33

1 / 1 pts

A patient states that his girlfriend was recently diagnosed with hepatitis, and he tests positive for hepatitis C. He expresses fear of the diagnosis because his father died after a liver transplantation. Which existing information in the patient's history is the most significant factor in the progression of liver failure?

Lack of fluid intake

Lack of exercise